

Appl. No. 10/740,200  
Amendment C  
In Reply to the Office Action mailed April 30, 2008

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled).
2. (Previously Presented) A system comprising:  
a plurality of fixedly mountable microphones;  
circuits coupled to respective microphones including circuitry for evaluating intelligibility of audio received by the respective microphones and generating an indicator of intelligibility on a per microphone basis, the circuits each include a network output port and which includes a plurality of ambient condition detectors with at least some of microphones carried by respective ones of the detectors.
3. (Original) A system as in claim 2 where at least some of the circuits are carried by respective ones of the detectors coupled to respective microphones also carried by the same detector.
4. (Currently Amended) A system comprising:  
a plurality of fixedly mountable microphones;  
circuits coupled to respective microphones including circuitry for evaluating intelligibility of audio received by the respective microphones and generating an indicator of intelligibility on a per microphone basis, the circuits each include a network output port and circuitry that produces prestored speech intelligibility test signals and which includes at least one audio output device which audibly produces the speech intelligibility test signals which will be received by the microphones.

5. (Original) A system as in claim 4 which includes control circuits coupled to the microphones and the audio output device, the control circuits couple electrical representations of the speech intelligibility test signals to the output device.

6. (Original) A system as in claim 5 which includes a plurality of audio output devices coupled the control circuits.

7. (Currently Amended) A system comprising:  
a plurality of fixedly mountable microphones;  
circuits coupled to respective microphones including circuitry for evaluating intelligibility of audio received by the respective microphones and generating an indicator of intelligibility on a per microphone basis, the circuits each include a network output port and which includes a plurality of distributed ambient condition detectors of airborne ambient conditions.

8. (Currently Amended) A system in claim 7 where at least some of the detectors carry respective [[one]] ones of the microphones and the detectors are selected from a class which includes smoke detectors and gas detectors.

9. (Currently Amended) A system comprising:  
a plurality of fixedly mountable microphones;  
circuits coupled to respective microphones including circuitry for evaluating intelligibility of audio received by the respective microphones and generating an indicator of intelligibility on a per microphone basis, the circuits each include a network output port and ~~where the~~ control circuits which include at least one of logic or executable instructions for producing speech intelligibility test signals to be audibly output by the at least one audio output device.

10. (Original) A system as in claim 9 which includes additional logic or executable instructions for processing the speech intelligibility test signals received from the respective microphones.

11. (Previously Presented) A method comprising:  
generating and providing at least one machine generated speech intelligibility test signal;  
sensing the speech intelligibility test signal at least one fixed location;  
evaluating the intelligibility of the sensed speech intelligibility test signal.

12. (Original) A method as in claim 11 which includes generating a plurality of speech intelligibility test signals.

13. (Original) A method as in claim 11 which includes sensing the speech intelligibility test signal at a plurality of spaced apart, fixed locations.

14. (Original) A method as in claim 13 which includes:  
transmitting the sensed speech intelligibility test signal from the plurality of locations to a common site and then processing same to evaluate intelligibility thereof.

15. (Original) A method as in claim 14 where the processing at the common site includes visually presenting processing results.

16. (Original) A method as in claim 14 where the sensed speech intelligibility test signals receive initial processing prior to being coupled to the common site.

17. (Original) A method as in claim 16 with the initial processing conducted on a per location basis and where initially processed results are each indicative of intelligibility of received audio.

18. (Currently Amended) An apparatus comprising:  
at least one ambient airborne condition sensor;  
control circuits coupled to the sensor;  
a microphone coupled to the control circuits, the control circuits establishing  
an intelligibility index in response to signals from the microphone.
19. (Original) An apparatus as in claim 18 which provides at least one port for  
connection of external microphones.
20. (Original) An apparatus as in claim 18 which includes a network  
communications port.
21. (Original) An apparatus as in claim 20 where the intelligibility index  
comprises at least one of STI, RASTI, SII, or, a subset of one of STI, RASTI, SII.
22. (Currently Amended) An apparatus as in claim 18 where the ambient  
condition sensor comprises at least one of a smoke sensor, a flame sensor[[, a]]  
~~thermal sensor~~ or a gas sensor.
23. (Original) An apparatus as in claim 22 where the control circuits include a  
processor with logic or executable instructions for carrying out intelligibility index  
processing.
24. (Original) An apparatus as in claim 23 which includes a network  
communications port,  
the port facilitating coupling electrical energy to at least the control circuits,  
and coupling intelligibility indices at least from the control circuits to a medium.

25. (Original) An apparatus as in claim 24 where the communications port includes an interface for carrying out bi-directional communication via a medium.
26. (Original) An apparatus as in claim 25 where the interface includes circuits coupled to at least one of an electrical cable or an optical cable.
- 27-31. (Cancelled)
32. (Currently Amended) A system comprising:  
control circuits for producing prestored electrical representations of speech intelligibility test signals;  
at least one audible output device coupled to the control circuits to audibly emit the speech intelligibility test signals;  
a plurality of spaced apart acoustic sensors; and  
circuits coupled to respective acoustic sensors including circuitry for evaluating intelligibility of audio audible test signals received by the respective acoustic sensors and generating an indicator of intelligibility on a per acoustic sensor basis.
- 33-34 (Cancelled)
35. (Previously Presented) A system as in claim 32 which includes a plurality of audio output devices coupled to the control circuits.
36. (Previously Presented) A system as in claim 32 which includes a plurality of distributed ambient condition detectors.
37. (Currently Amended) A system comprising:  
control circuits for producing electrical representations of speech intelligibility test signals;

at least one audible output device coupled to the control circuits to audibly emit the speech intelligibility test signals;  
a plurality of spaced apart acoustic sensors; and  
circuits coupled to respective acoustic sensors including circuitry for evaluating intelligibility of audio received by the respective acoustic sensors and generating an indicator of intelligibility on a per acoustic sensor basis including [[A]] system as in claim 36 a plurality of smoke detectors, where at least some of the detectors carry respective ones of acoustic sensors.

38. (Previously Presented) A system as in claim 32 where the control circuits include executable instructions for producing speech intelligibility test signals to be audibly output by the at least one audio output device.

39. (Previously Presented) A system as in claim 38 which includes additional executable instructions for processing the speech intelligibility test signals received from the respective sensors.

40. (New) An apparatus comprising:  
a source of pre-stored intelligibility test signals;  
a plurality of loud speakers coupled to the source so as to broadcast selected test signals;  
a plurality of microphones which receive at least some of the broadcast test signals;  
at least one detection circuit coupled to a respective microphone for automatically generating a speech intelligibility indicium associated with the respective microphone and for transmitting that indicium via a medium to a displaced site.

41. (New) An apparatus as in claim 40 which includes:

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a plurality of smoke detectors where at least one microphone is carried by a respective detector and coupled thereto.